

change in the way objects look when viewed from different positions. It has been adapted for use with the oblique photographs taken by aerial cameras. Only the horizon line is needed as a reference mark, the horizons on the two photographs being lined up with an etched line on the flat surface of the instrument.

Corresponding points on the photos are projected to a fixed base line by means of two arms. There the parallax is measured, and using the parallax formula, the elevation differences are computed.

The Hypsometer is made by the Union Instrument Corp. of New Jersey for the U. S. Army's Engineer Research and Development Laboratories at Fort Belvoir, Va.

Speedy Camera Shutter

➤ A NEW shutter for aerial cameras, designed for use in photo reconnaissance, gives more accurate pictures at higher flying speeds than with previous shutters. The clearer the photographs, the easier it is for U. S. Air Force photo-interpreters to spot camouflaged guns and troop concentrations.

The shutter, built into a drawer so that it can be repaired easily, has two sets of blades. One opens and the other closes, almost at the same instant. The lightning-like movements are what increase the efficiency of the shutter, giving clearer pictures for the same time exposure.

For inventing this device, known as the Fairchild Rapidyne, Frederick P. Willcox of Fairchild Camera and Instrument Corporation was awarded the 1952 Photogrammetric Award of the American Society of Photogrammetry.

Science News Letter, January 19, 1952

Grass *silage*, now popular on American farms, is made from any of the green crops that might otherwise be dried and made into hay.

BIOPHYSICS

Ward Off Atomic Radiation

➤ TO INCREASE your chances of surviving radiation death when the A-bombs fall, take a cocktail or other alcoholic drink and eat a steak when you hear the warning siren.

This action seems to be justified by a discovery of Drs. Edith Paterson and Joyce J. Matthews at Christie Hospital and Holt Radium Institute, Manchester, England.

Alcohol drunk 80 and 20 minutes before irradiation saved more than a fourth of a group of mice exposed to killing doses of radiation, these scientists discovered.

When they gave mice salt water before irradiation, all the mice died. Of the group that got the alcohol, only 63% died.

Alcohol taken immediately after irradiation and again one hour later was not effective in saving the mice.

Cysteine, one of the protein building blocks found in meats, had a greater protective effect when injected into the veins of the mice than the drinks of alcohol, which suggests eating steak or other protein food along with the alcohol for possible protection against irradiation.

The alcohol given the mice was diluted with salt solution to a concentration of 10% by volume. The mice got about a fourth of a teaspoon (one milliliter) of this 80 minutes and again 20 minutes before the irradiation.

Alcohol at a concentration of 5% was about equally as effective as the 10% concentration.

The protective effect of the alcohol was apparently not related to its anesthetic effect, since nembutal and ethyl carbamate, given in anesthetic doses, were not effective.

Discovery of alcohol's protective action for mice exposed to killing doses of radiation is announced in the journal *NATURE* (Dec. 29, 1951). Because this is a report

to fellow scientists, it does not point out the fact, obvious to scientists, that since men are not mice they may not get the same protective effect from alcohol taken before irradiation.

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